

Abstract of the Invention

An optical fiber is disclosed that can be used as an active medium in fiber lasers and / or fiber amplifiers, featuring a preferably rare-earth-doped silica active core surrounded by a pure or doped silica cladding layer ("pump core"). The pump core is
5 surrounded by a doped or pure silica inner cladding for guiding pumping radiation within the pump core. Thus, the refractive index of the inner cladding is lower than that of the pump core. The fiber is surrounded by a protective coating made of polymeric material. One or more additional outer cladding layers, having refractive indexes lower than said inner cladding, may optionally be placed between the inner cladding and the protective
10 coating to further protect the polymer coating from damage. Unlike the prior art, the protective coating does not serve as the only cladding, but is assisted by the inner cladding and optional outer cladding(s). The resultant fiber restricts radiation mainly to silica layers, thereby increasing the damage threshold and the applicable maximum pump power of the fiber.

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